

KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

August 2012

Aerial Image of Kingston Ash Slide (08/30/2012)



Filename: ImageOnly_20120830_6x11

0 1,000 2,000 3,000 4,000
Feet

Date of imagery: 08/30/2012

Tennessee Valley Authority
Realty, GIS & Land Records

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MONTHLY REPORT

August 2012

SAFETY

- Nineteen (19) individuals attended site-specific health, safety and environment (HSE) orientations during August 2012 – 2,265 year-to-date. Zero site-specific refresher courses were conducted during the month of August 2012 - 435 year-to-date.
- Eighty-seven (87) safety observation reports (SORs) were submitted during August 2012 – 3,045 year-to-date; 3,044 are closed.
- No injuries in the month of August 2012.

INFRASTRUCTURE / ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.

ASH SLURRY AND POND TOTAL SUSPENDED SOLIDS (TSS) CONTROL

- Daily total suspended solids (TSS) sampling and pH monitoring were performed throughout the ash slurry system. The TSS of the sluice trench discharge averaged 44.5 mg/L, the main ash pond effluent TSS averaged 83.8 mg/L and the stilling pond effluent averaged 10.4 mg/L for August 2012.
- The sluice trench effluent and ash pond effluent polymer addition rates were adjusted based on TSS levels during August 2012.
- The plant started and ended August operating nine units.

PLANT ASH STORAGE / INTERIM ASH STORAGE AREA (BALLFIELD)

- Trans Ash placed and compacted dry fly ash during the month. Geosyntec provided quality control and assurance during August 2012.
- The Kingston Fossil Plant (KIF) plant operated from six to nine units during the month, average of 8.2.

CENOSPHERE CONTROL ACTIVITIES

- Daily pond inspections were performed for all ponds. Skimmer pumping from near outlet to cenosphere collection zones was carried out on all three ponds.
- Collection of cenospheres by hydro-vacuum truck was carried out from August 1 to August 22, 2012 with 14 loads collected.

ROUTINE MONITORING

Surface Water Sampling

- Continued reduced scope routine surface water monitoring. All monthly stilling pond results received to date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit.
- There were rainfall events on August 9 and 14, 2012 that triggered storm flow sampling in Swan Pond embayment.
- Automated monitoring stations (Hydrolabs) are online continuously monitoring pH at three locations in the settling ditch system. The real-time pH results from the settling ditch system are monitored daily and used to make acid-dosing decisions to control the pH of the outflow.
- Continued daily TSS monitoring at the sluice trench, ash pond Agri-Drains and stilling pond.

Air Sampling

- All air monitoring results for August, 2012 from the PM2.5 TVA air samplers were below the current ambient air monitoring plan (AAMP) action levels.

Data Management

- Provided monthly surface water and air monitoring results to the EPA.

Biota Sampling

- Virginia Tech has finished all field activities associated with the tree swallow and turtle sampling, vacated the lab house, and mobilized all equipment and personnel back to Virginia Tech.

Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of dredge cell and ballfield operations.
- Continued confirmation sampling support for middle embayment ash removal.
- Performed exploration Geoprobe in support of jet grouting demo.
- Supported sampling for Segment 8 toe road advances.
- Conducted an emergency reconnaissance of reported oil sheen in the river on August 22, 2012. In-house analysis determined sample to be organic and cenospheres with no petroleum product.
- Collected bulk surface water and sediment for Duke University.

DREDGE CELL

- Geo-Con completed the designed perimeter wall stabilization (PWS) construction in Segment 7 with one rig.
- Griffin continued pumping from well points in PWS Segment 7 until PWS construction was complete. Griffin began operational shutdown and was placed on temporary standby, then directed to demobilize once the decision was made not to install dewatering wells in Segment 2.
- Stacking continued in the central dredge cell, primarily in the area next to Dike D.
- CP continued drying materials in the relic area of the southern dredge cell (and in the drying pits next to Dragline Road during wet weather) and hauling from the relic to active ash stacking. CP also continued the use of windrows in the central Dredge Cell for drying of ash from the embayment.
- Stantec submitted their reviews of the results from Geo-Con's jet grouting test for mitigation of wall defects. Decision was made to proceed with use of jet grouting for repair of defects in Segment 7.
- Stantec submitted a letter report presenting results of the shear tests for defining "cold joints", and recommending increasing the cure time from 14 days to 20 days. An FCN was approved to implement that change.
- Stantec began a series of geotechnical borings in the southwestern corner of the relic area to evaluate optional alignments for PWS Segments 5 and 6 that would optimize costs and/or impacts of rock excavation and additional relic ash excavation.

LATERAL EXPANSION

- Geo-Con began PWS construction in Segment 2, initially with one rig then with both rigs once Segment 7 PWS construction was completed.
- CP removed material from Dike D to lower the road elevation to the PWS platform level for Segment 2.
- Restrictions were lifted on no stacking in the lateral expansion as movement of slope inclinometers stopped. Stacking resumed in both the lateral expansion and ash pond. Placement restrictions are in effect that limit stacking to a maximum of 1 foot per day, with guidance to limit stacking in any given area to once per week.
- Stantec submitted IFC drawings for ash pond stacking, following regulatory approval of the ash pond ash stacking design.

RIVER ENGINEERING EVALUATION / COST ANALYSIS (EE/CA) AND BASELINE ECOLOGICAL RISK ASSESSMENT (BERA)

- TVA released the final River EE/CA (including BHHRA and BERA) for public comment.
- A public meeting was held regarding the River EE/CA.
- EPA approved an extension to the public comment period to October 10, 2012.

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- TVA issued the RFP for the construction of Phase 1 (Lakeshore Peninsula) of the Swan Pond Recreation Area.
- Jacobs began further modifications of the revised 90% design package for the embayment restoration to remove contouring at the bottom of the north embayment.

MIDDLE EMBAYMENT

- Ash removal from the middle embayment was performed during the month and cumulative excavation fell slightly below target.
- Weekly middle embayment status reports were submitted.
- NTC concurrence KIF-12-001 was approved and KIF-12-002 was submitted. Work on the third concurrence submittal was underway at month's end.
- Completion of the clean haul road from the underpass along the clean water ditch and continuing south along Swan Pond road is near completion, pending cold joint repair and drainage ditch 1 construction.

COMMUNICATIONS

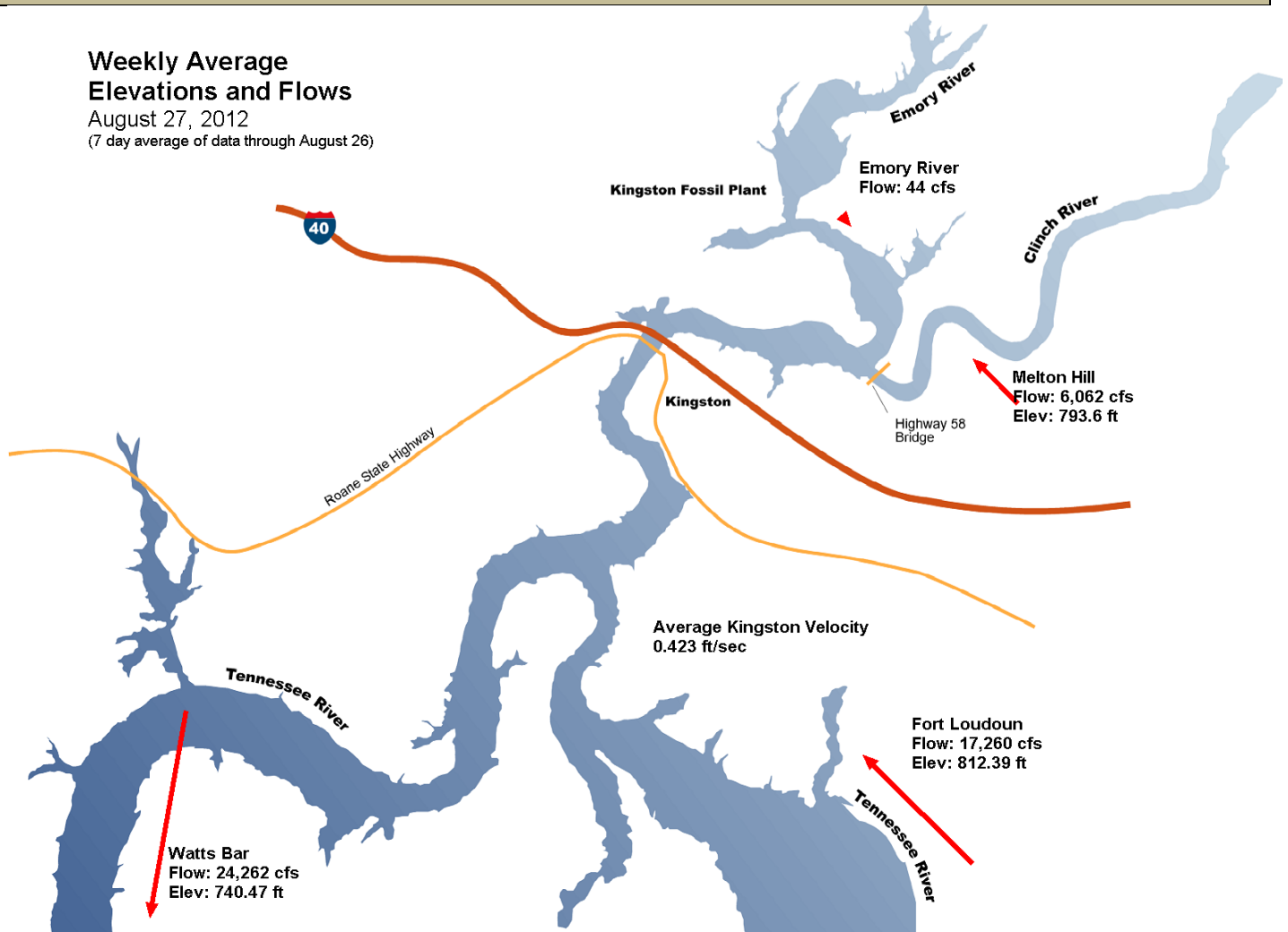
- Added weekly area resident updates to Kingston Ash Recovery website.
- Sent weekly updates to the Community Advisory Group (CAG), public officials and members of the public who have signed up to receive weekly emails.
- Updated administrative record with work plans and relevant documents.
- Continued to respond to calls from residents.
- Updated site bulletin boards.
- Ran news releases and newspapers ads for release of the River System EE/CA for public comment.
- Held a Public Meeting August 21, 2012, to discuss the River System EE/CA.
- Met with the CAG members to discuss the River System EE/CA.

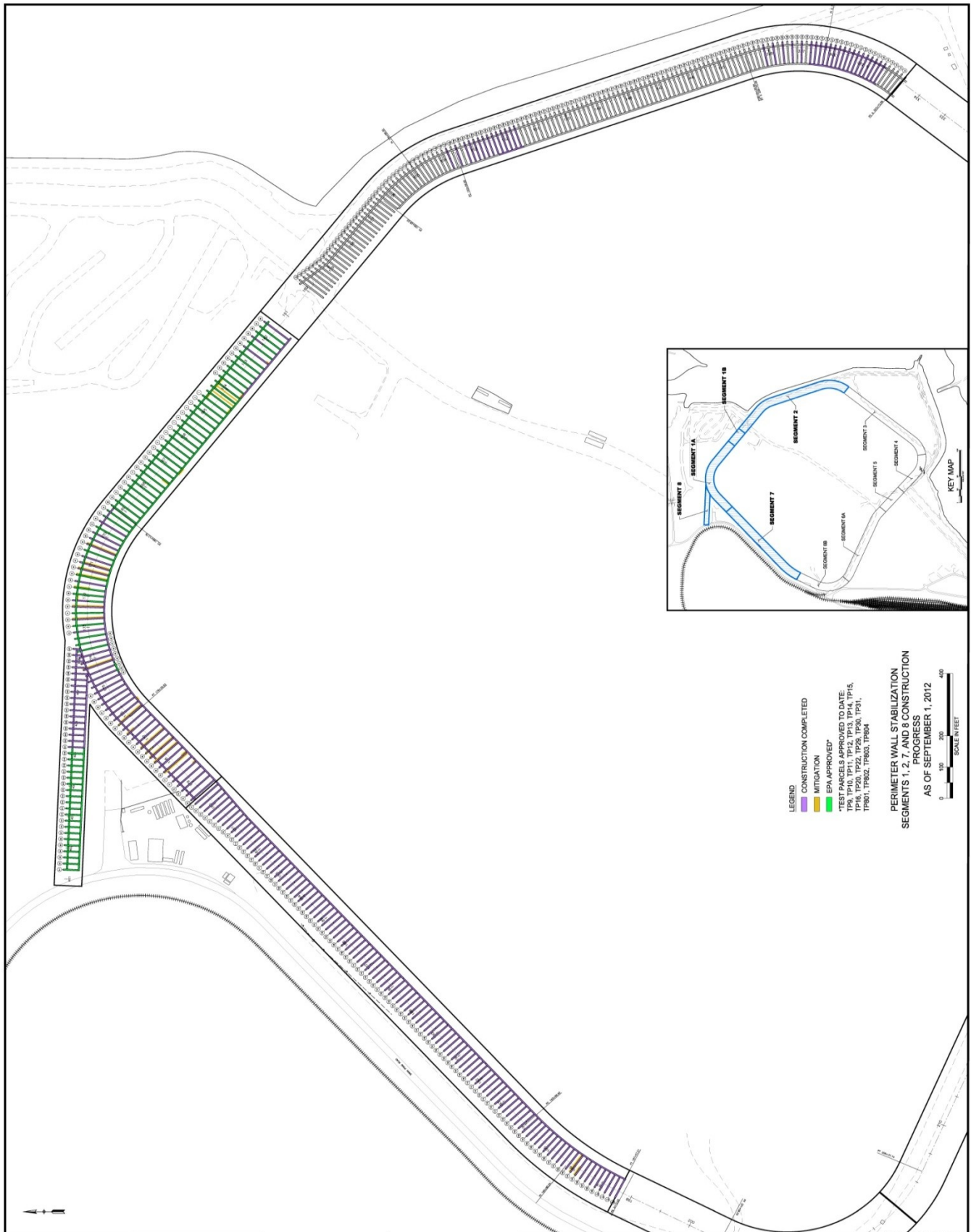
RIVER OPERATIONS

Weekly Average Elevations and Flows

August 27, 2012

(7 day average of data through August 26)



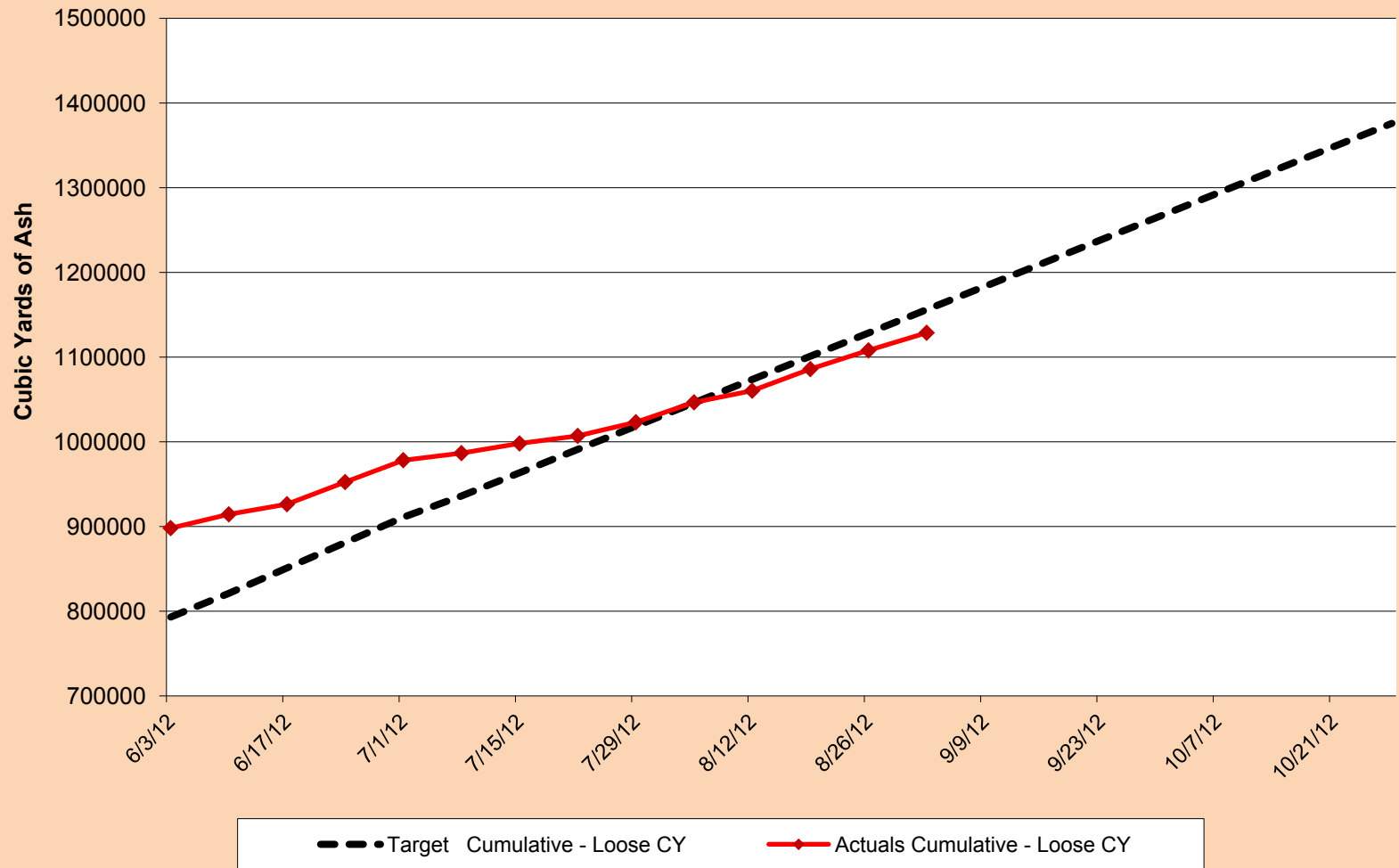


Kingston Ash Recovery Project			August 2012		Field Report
Safety			Monthly Total	FY – Cumulative Total	
Near Misses			0	0	
First Aid Incidents			0	13	
Recordable Incidents			0	1	
Recordable Lost Time Incidents			0	0	
Environmental	Matrix	Samples	Analyses	Results	
Organization - TVA	Surface / Utility Water	5,699	48,219	261,438	
Organization - TVA	Groundwater (Spring & Well)	255	2,653	15,518	
Organization - TVA	Ash	756	1,330	9,963	
Organization - TVA	Soil / Sediment	1,190	2,303	17,207	
Organization - TVA	Biota	5,005	11,029	128,758	

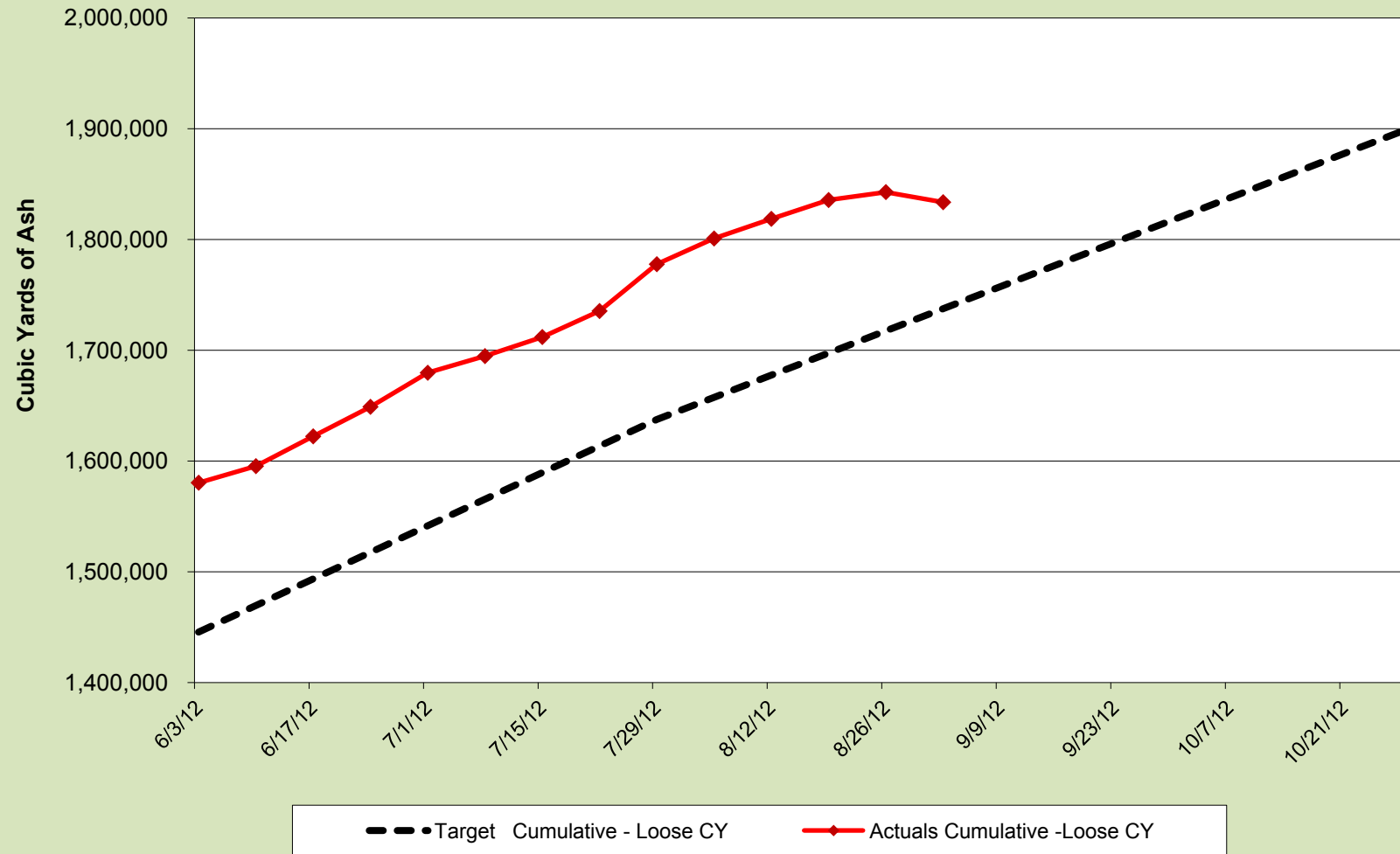
Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation		
Total Removed from Middle Embayment	71,257	811,323
Total Removed from North Embayment	-	1,010,322
Total Removed from Settling Basins / Dike 2	1,520	27,305
Excavated Total	72,777	1,848,950
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement		
Total Placed in Dredge Cell	53,174	1,202,537
Total Placed in Lateral Expansion	2,208	549,941
Total Placed in Ash Pond	53,350	332,027
Placed Total	108,733	2,084,505
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling		
Total Removed from Lateral Expansion	62	50,834
Total Removed from Dredge Cell	53,524	560,199
Total Removed from Ballfield	13,099	446,929
Removed from Storage Total	66,686	1,057,963
Net Removed to(from) Ballfield Storage	(7,711)	(145,807)

For period ending August 31, 2012.

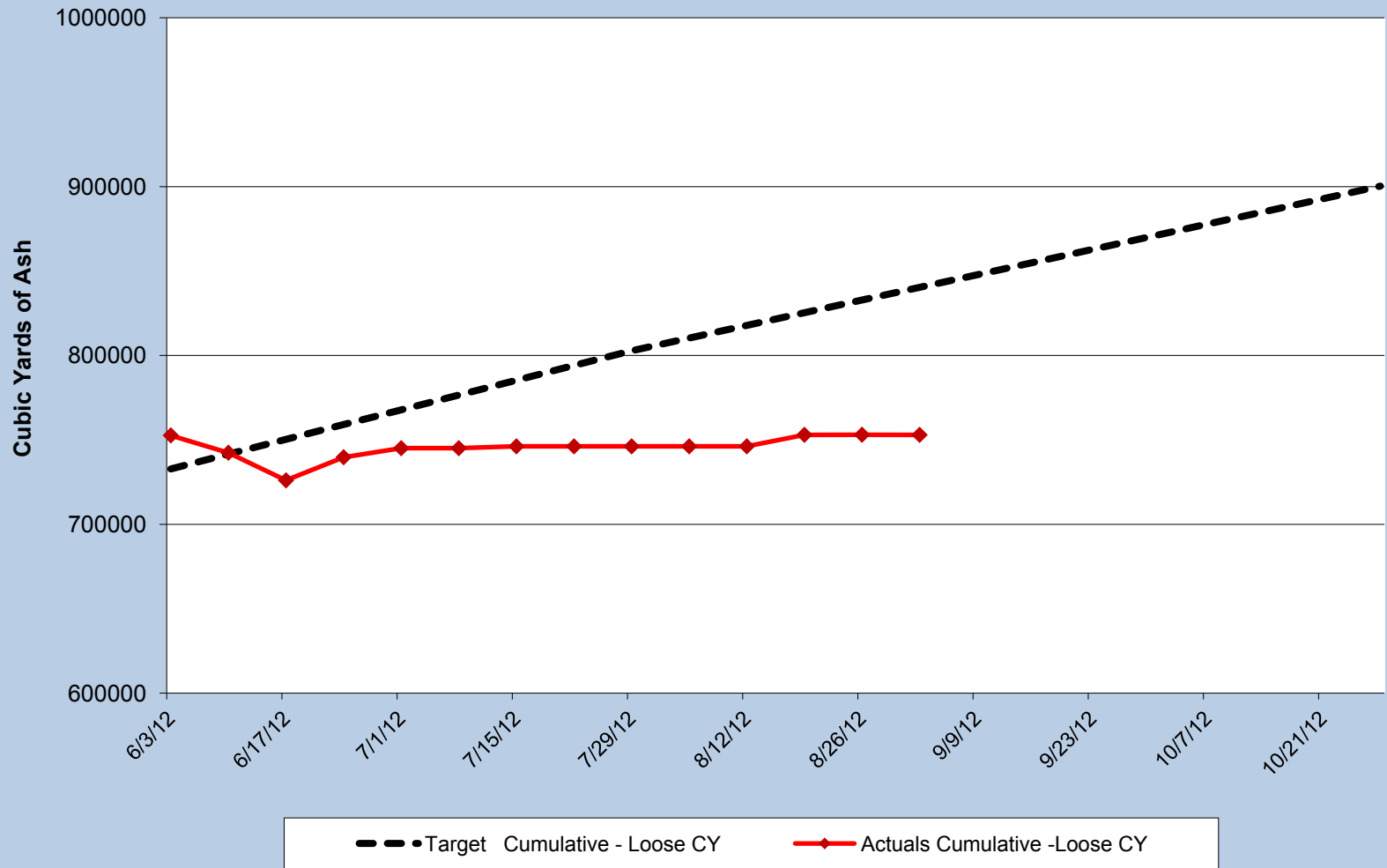
Ash Excavation from Middle Embayment Weekly as of August 31, 2012



Ash Stacking in Dredge Cell Weekly as of August 31, 2012



Ash Stacking in Lateral Expansion Weekly as of August 31, 2012



**Perimeter Wall Stabilization Segment 1, 8, 7 & 2
Weekly as of August 31, 2012**

